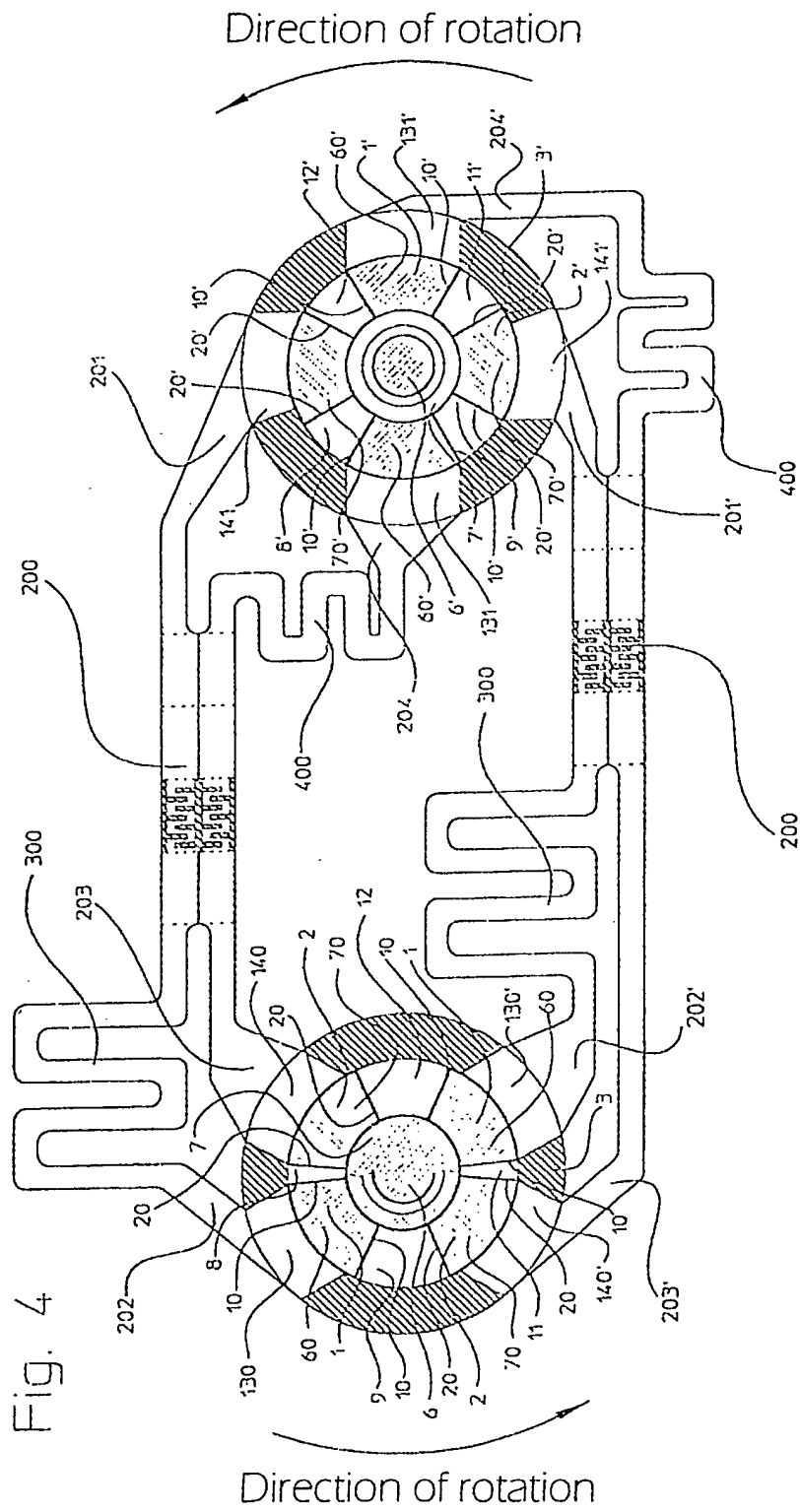


Fig.3



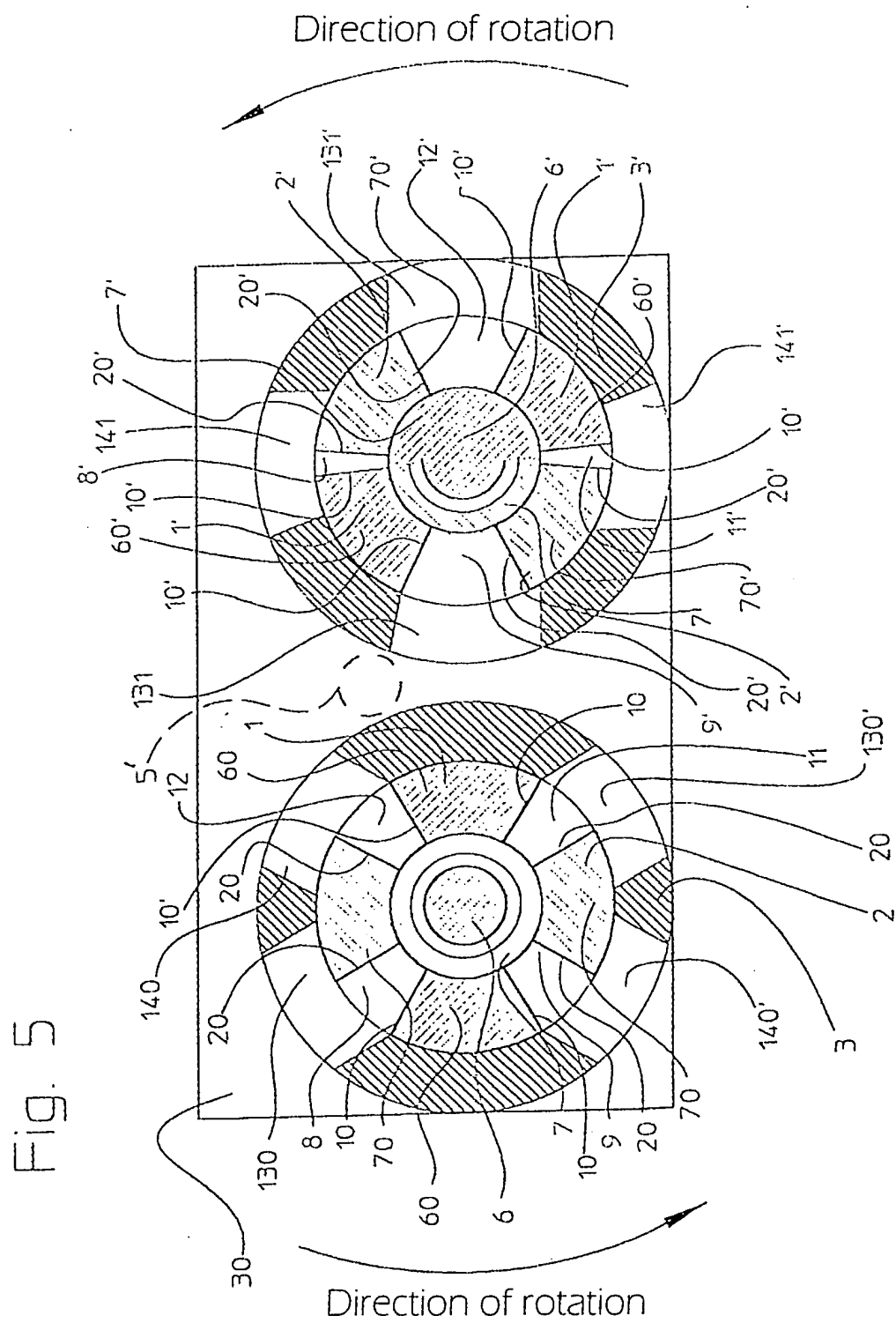


Fig. 6

Work cycle		State	Gas path	reg. = regenerator cyl. = cylinder WG = working gas					Cyl. displacements		Working gas
				Cham-ber	Total volume	Pressure	Ports	Temperature	Cyl. 100	Cyl. 101	
0	1		Expanded WG is in cylinder 3	1	large	low	0	medium	large		
1-2			WG is forced through reg. and cooler (from cyl. 3 to cyl. 3')		remains constant	decreases	↓ 140 131	isochoric temperature drop	decreases	increases	
1	2		Half of expanded WG is in cyl. 3 and half in cyl. 3'	1 and 2	large	very low	↓ 140 131	low	medium	large	
2-3			All of WG is forced into cyl. 3' and pre-compressed		decreases	increases	↓ 140 131	adiabatic temperature increase	decreases	decreases	
2	3		WG is in cyl. 3' (precompressed)	2	small	medium	0	medium	0	medium	
3-4			WG flows from cyl. 3' to cyl. 3 (through reg. and heater)		remains constant	increases	↓ 141 130	isochoric temperature increase	increases	decreases	
3	4		Pipe connection 141-130 is maintained. WG forces both cylinder displacements apart	3	small	maximum pressure	141 130	maximum temperature	medium	0	
4-1			WG expanded, most thereof remaining in cyl. 3 => work stroke		increases	decreases	↓ 140 130 ↑ 130	adiabatic temperature drop	increases	increases	
4	1		Expanded WG is in chamber 1 (cyl. 3)	1	large	Low	0	medium	large	medium	

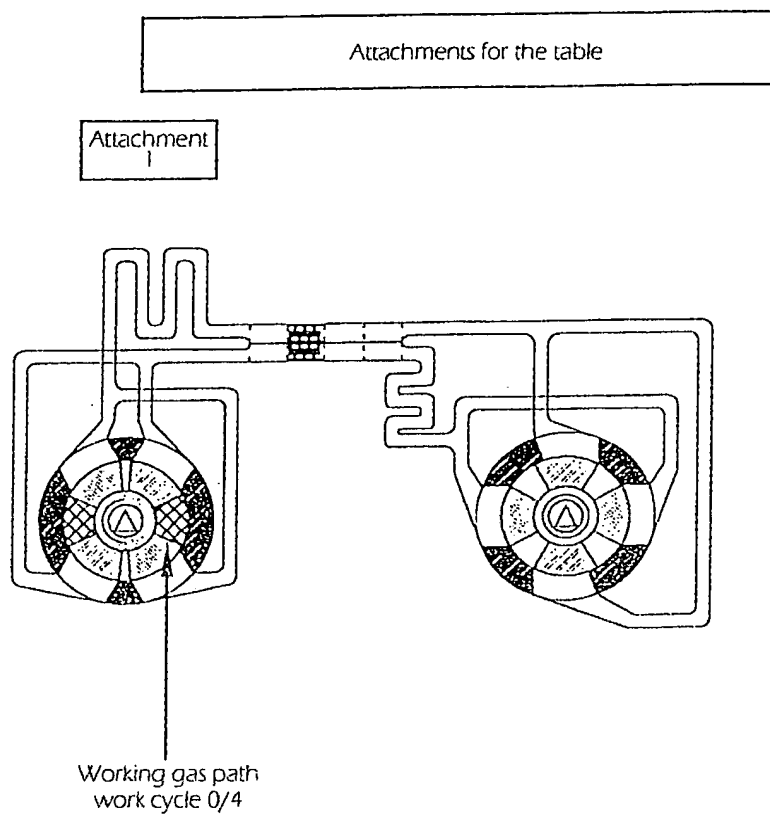


Fig. 7

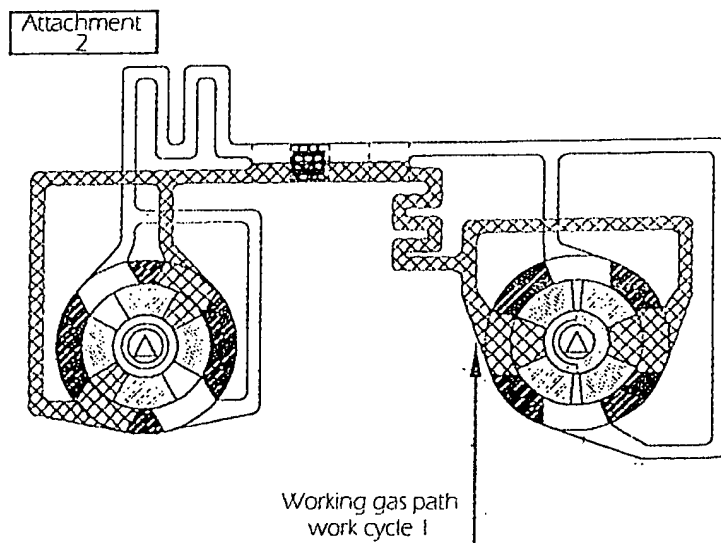


Fig.8

Attachment
3

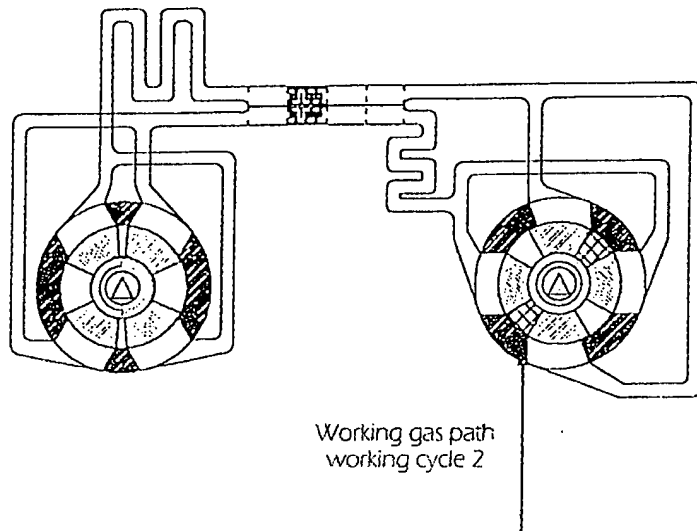


Fig. 9

Attachment
4

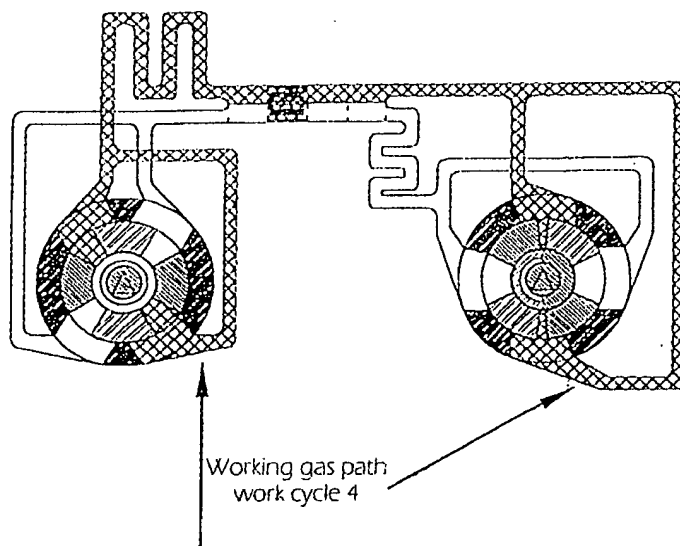
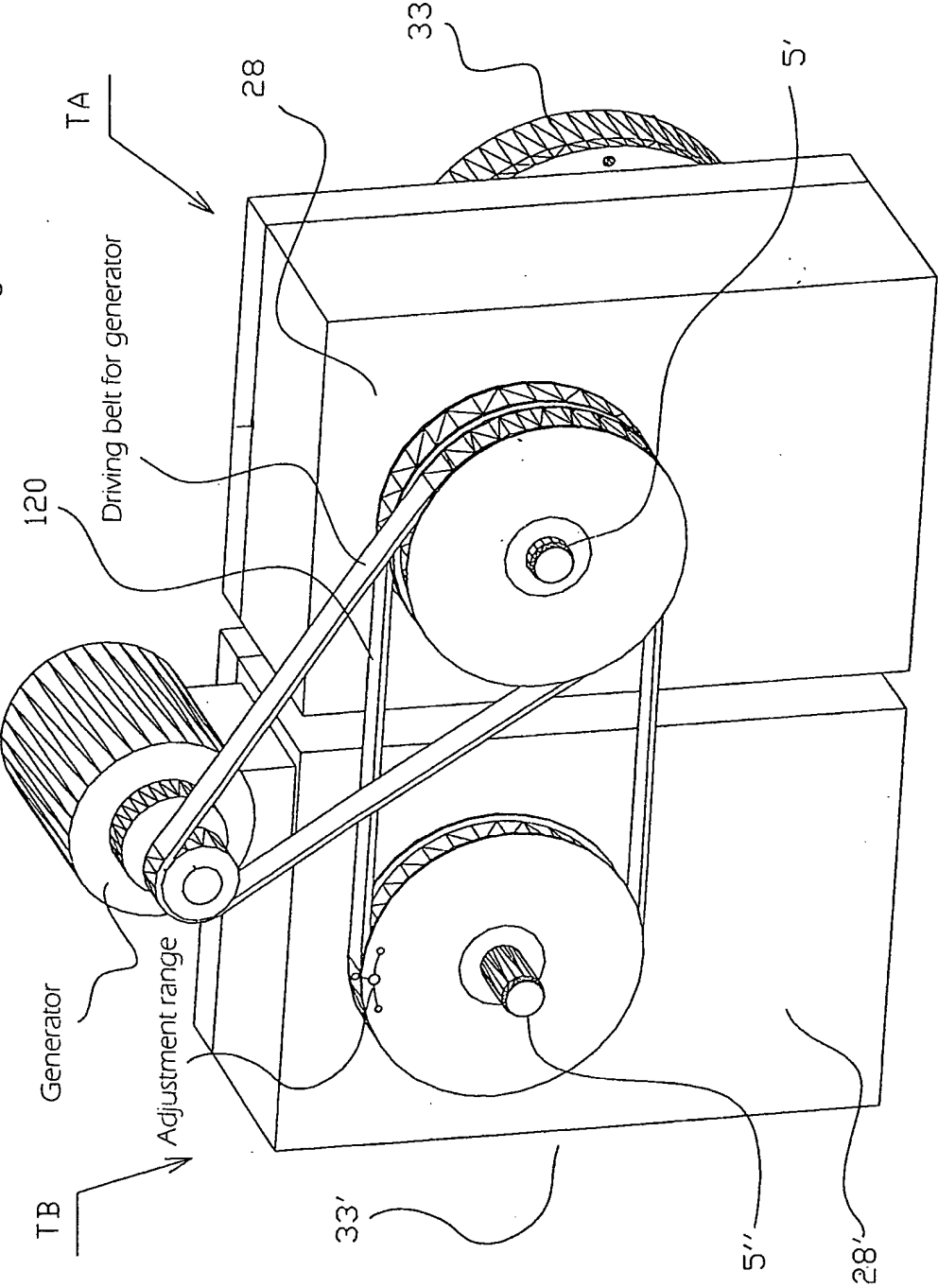
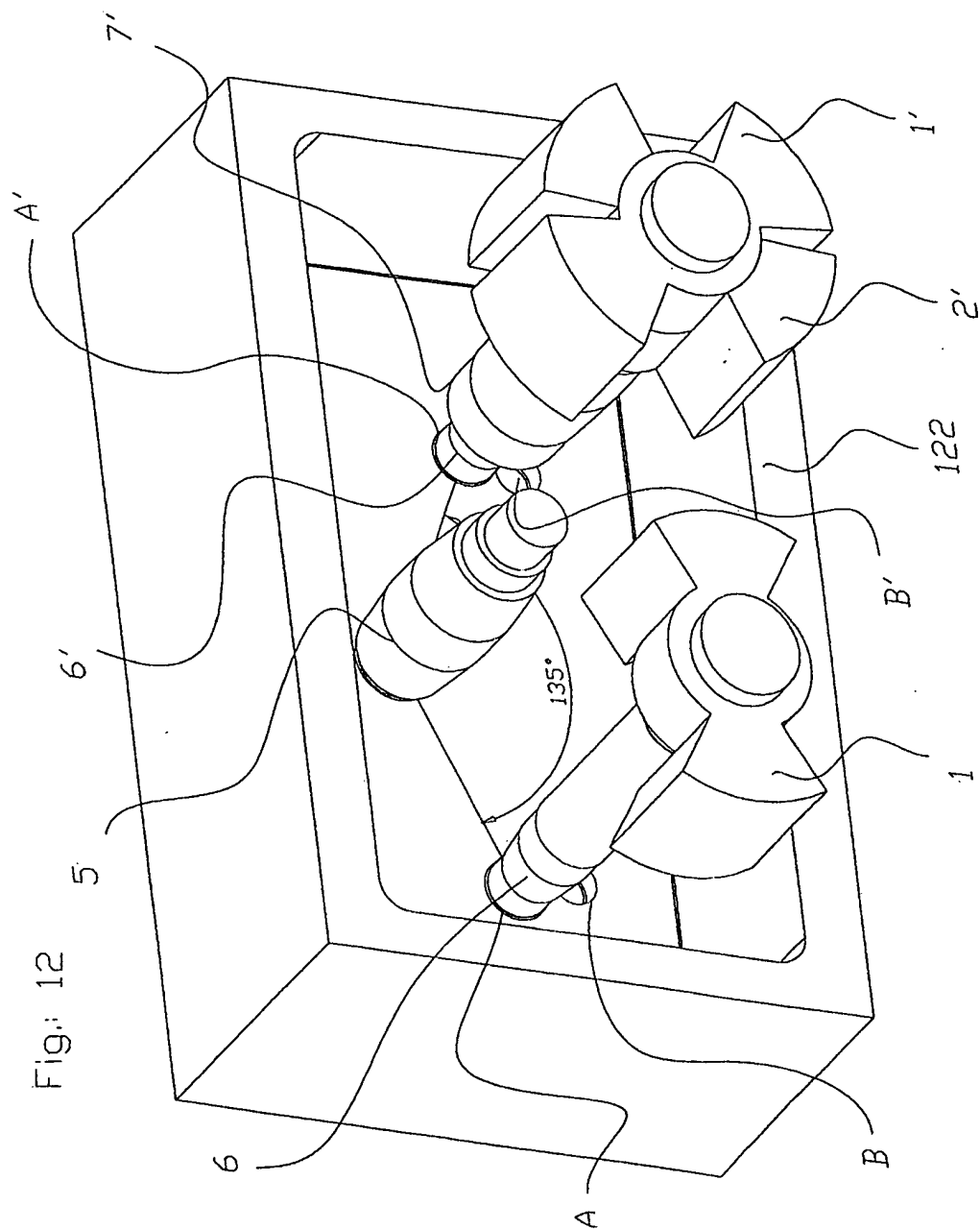


Fig. 10

Fig. 11





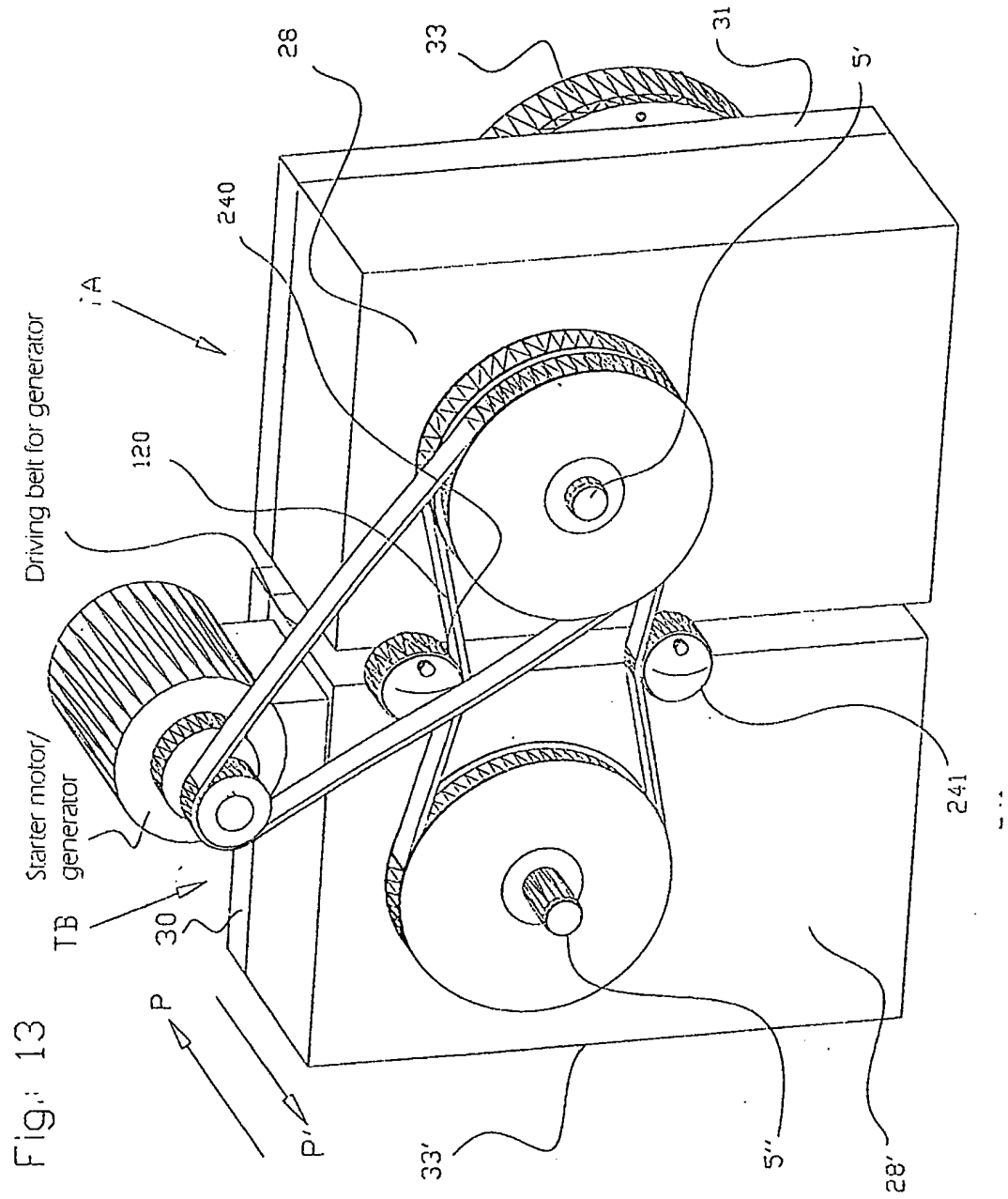


Fig.: 14

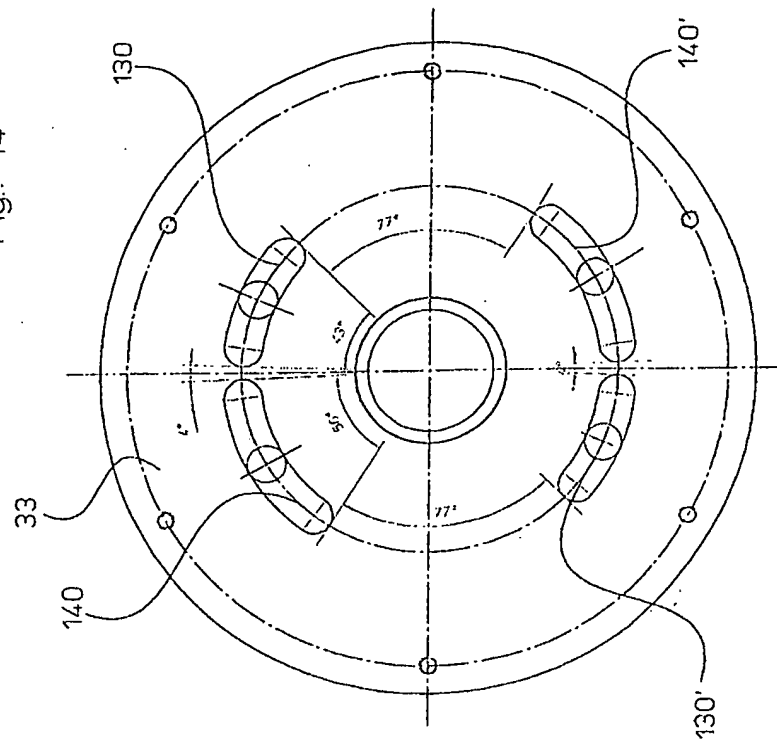


Fig.: 14A

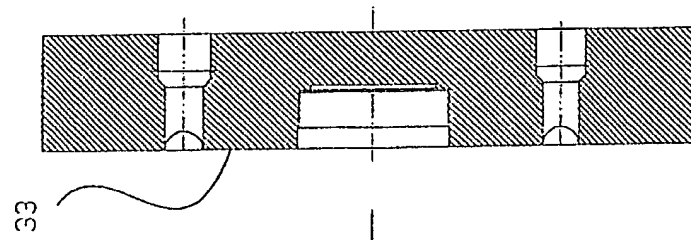
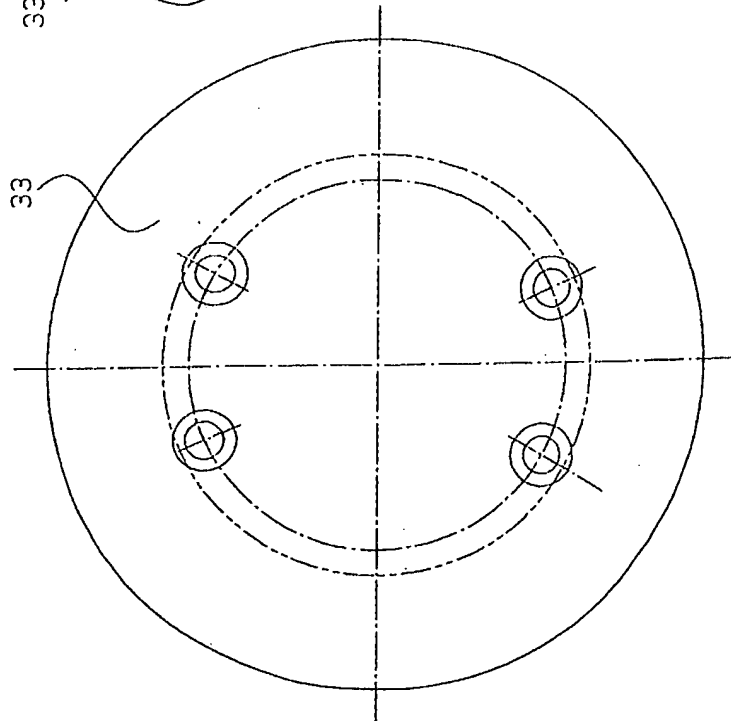


Fig.: 14B



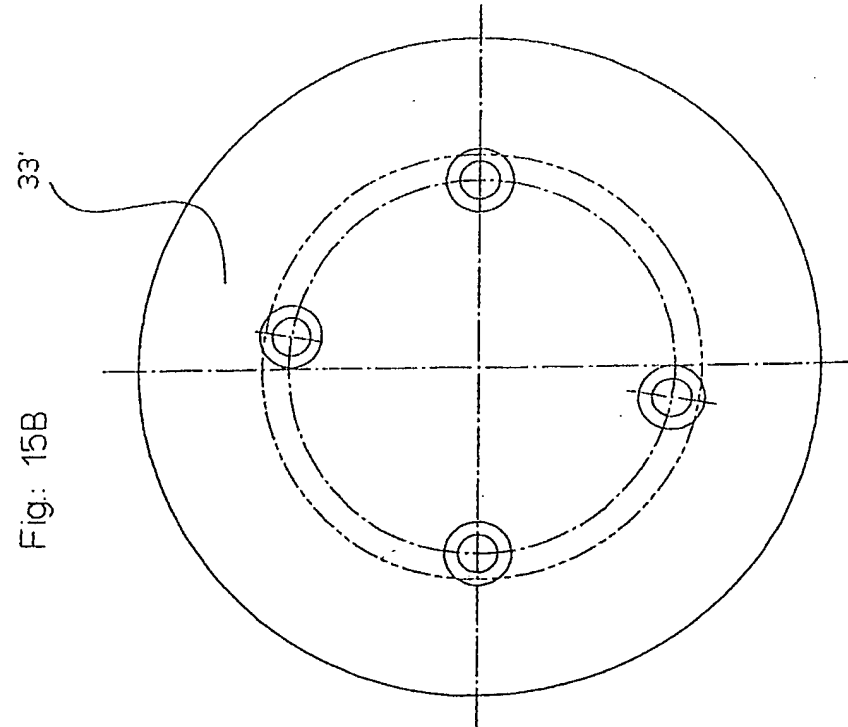
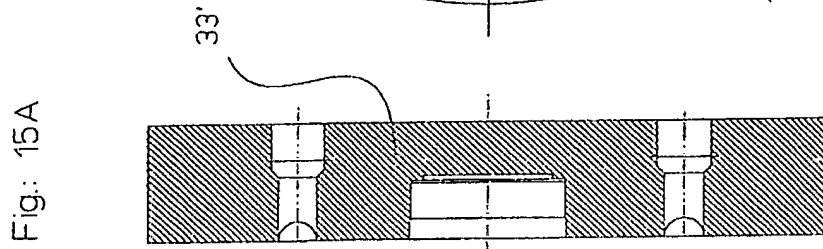
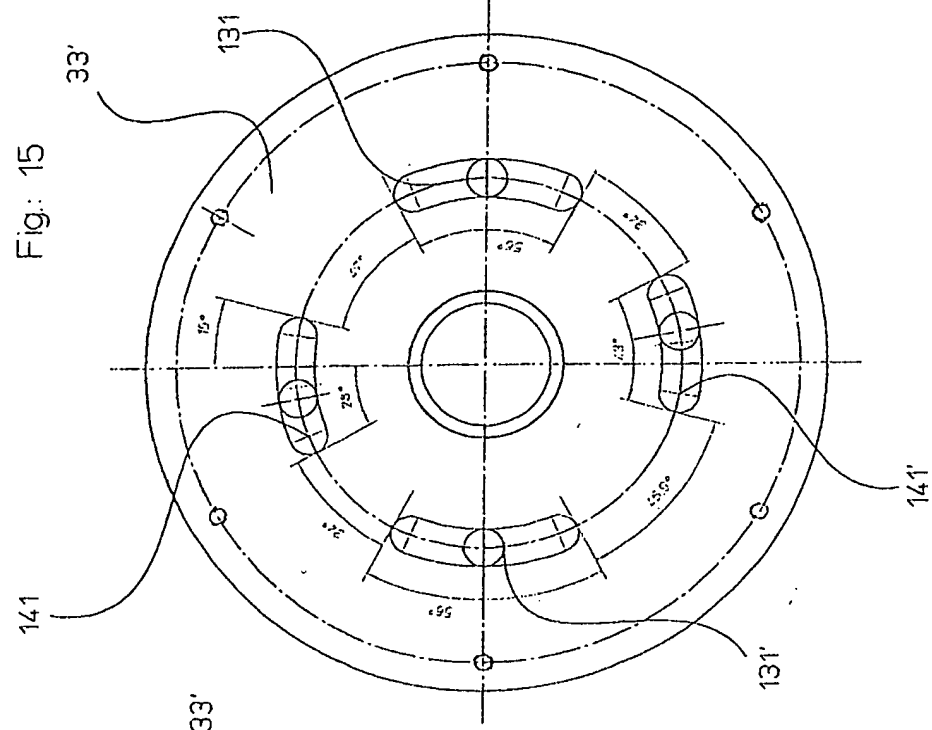
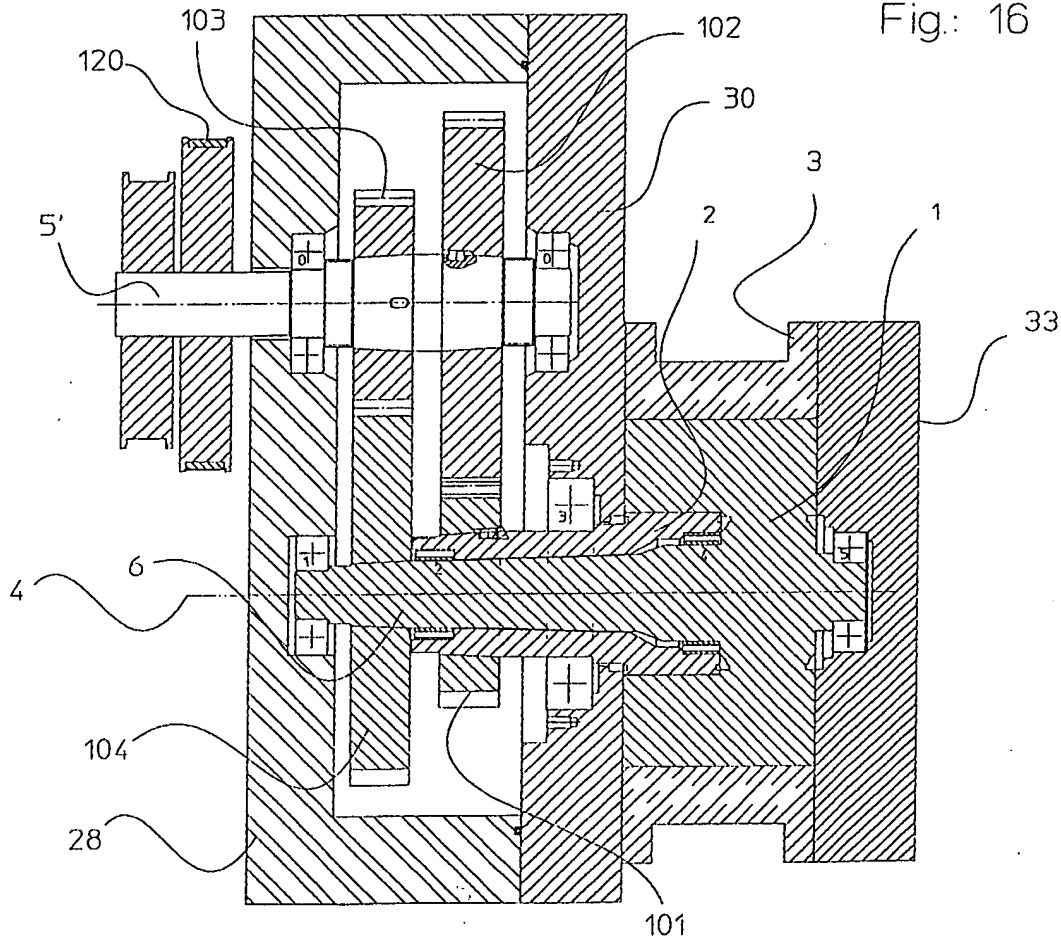
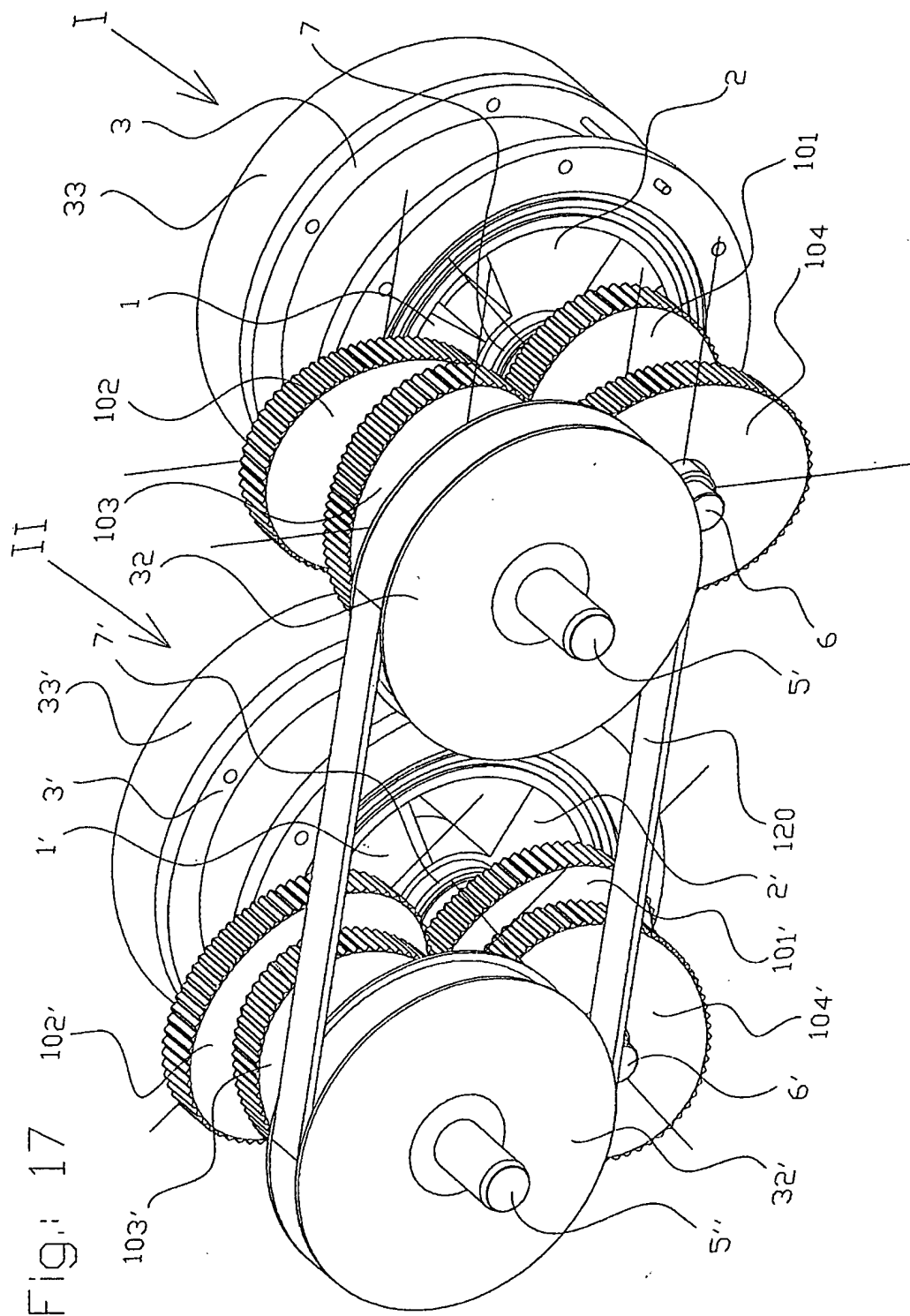


Fig.: 16





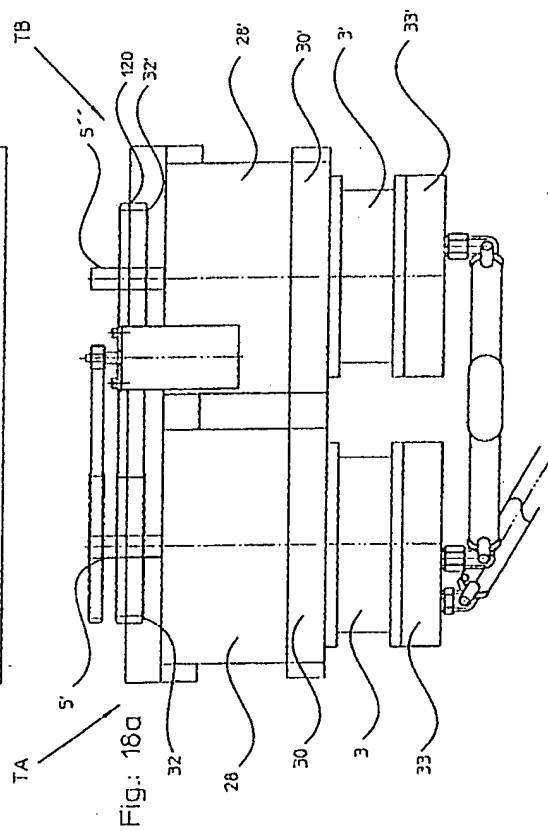
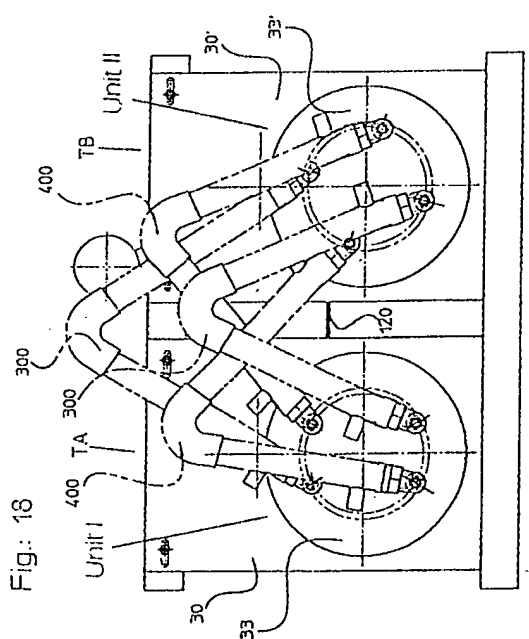
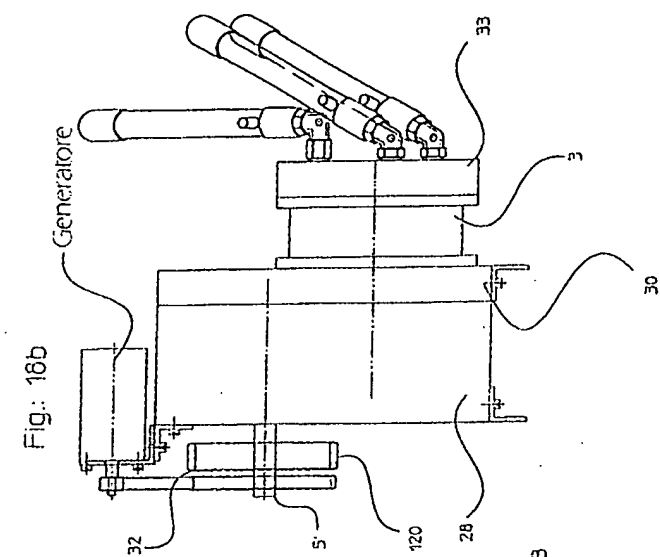


Fig. 19
Unit II

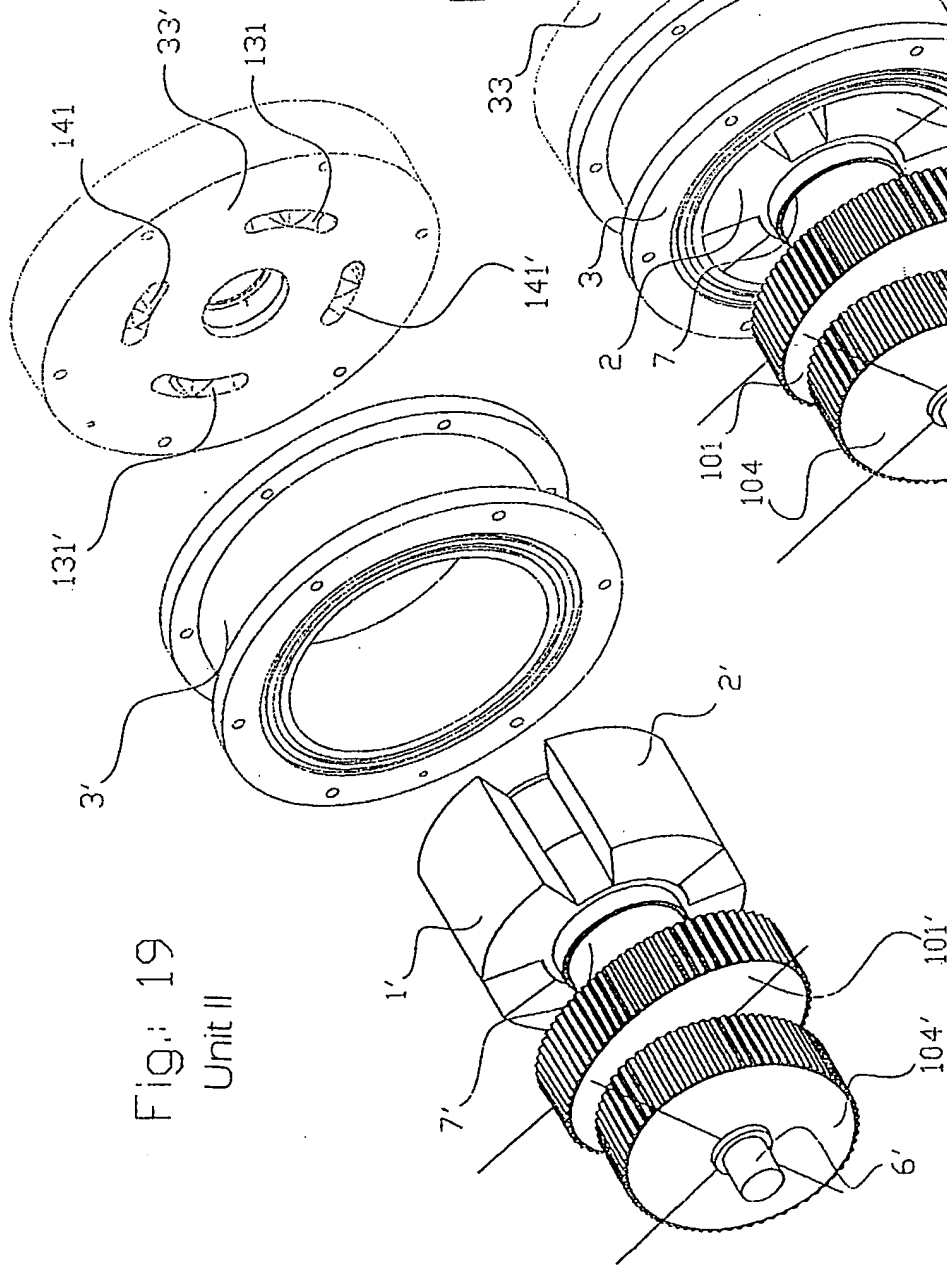


Fig. 20
Unit I

